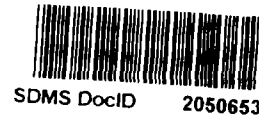


ARCADIS



Thomas Fridirici
Pennsylvania Department of Environmental Protection
Southcentral Regional Office
909 Elmerton Avenue
Harrisburg, PA 17110-8200

ARCADIS G&M, Inc.
6 Terry Drive
Suite 300
Newtown
Pennsylvania 18940
Tel 267 685-1800
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Subject

Response to February 23 and April 13, 2004 Letters,
Proposed Bally Water Supply Well

ARCADIS Project No.
NP0001597 0002 0005B

Environmental

Date

27 May 2004

Dear Mr. Fridirici:

Contact

Michael Bedard

On behalf of American Household, Inc. (AHI), ARCADIS G&M, Inc. (ARCADIS) has prepared responses to the comments presented in your February 23 and April 13, 2004 letters regarding the proposed water supply well for the Bally Public Water System (PWS). The comments from your February 23, 2004 letter are included below in italics with ARCADIS' responses following in standard text. A general response to the April 13, 2004 letter also is presented below.

Extension.

(267) 685-1800

February 23, 2004 Letter

Comment:

All aquifer test data used for permitting must be derived from the production well, i.e. cased and grouted with screen or slotted casings (if applicable) in place. You must provide an adequate annular space around the casing, use a drive shoe and casing centralizers and you must grout the annular space from the bottom upward in one continuous operation.

Response:

As specified in the June 23, 2003 Pre-Drilling Plan prepared by ARCADIS, the aquifer pumping test will be conducted on an 8-inch diameter well constructed in accordance with AWWA standards, and the PADEP Public Water Supply Manual Part II Community System Design Standards. This will include setting the casing using a drive shoe and casing centralizers, and grouting the borehole from the bottom upward in one continuous lift. The upper portion of the borehole will have a minimum annular space around the casing of 4 inches.

AR300232

Comment:

Provide information in the hydrogeologic report, copies of any executed deed restrictions or other information that shows the supplier's ability and willingness to control the Zone I wellhead protection area.

Response:

Information regarding control of the Zone I wellhead protection area will be provided with the Hydrogeologic Report that will be prepared after completing installation and testing of the 8-inch test well.

Comment:

Your plan needs to more clearly define the monitoring network that you propose to observe during the aquifer tests at this site. Please submit an addendum to this pre-drilling plan that shows on a map of appropriate scale the locations you intend to observe. List the names, addresses and phone numbers of the contact person at each location. Install a nested pair of piezometers in the wetland areas adjacent to the well sites and monitor water level before, during and after the test. Show the location of all piezometers on the aforementioned map. Describe the piezometer construction. Describe the method used to collect the water level data, frequency of data collection and corrections necessary to make the data useful. Collect enough background data in your monitoring network to provide a meaningful trend before, during and after your aquifer test.

Response:

Presently ARCADIS is in the process of obtaining access to existing wells in the vicinity of the Shuhler South location for the purpose of monitoring water levels during an extended aquifer pumping test. A Pre-Drilling Plan Addendum defining the monitoring network will be submitted to PADEP in the near future. The addendum will identify wells to be monitored and the proposed nested pairs of piezometers that will be installed in the wetlands and streams. The nested pairs of piezometers will consist of one piezometer screened below the stream bed or wetland surface, and a second piezometer open to the water standing above the streambed or wetland base. This configuration will permit changes in vertical gradient to be observed. The piezometers will be monitored with pressure transducers in order to define vertical gradients. The pressure transducers will be installed at least two weeks before the pumping test and removed no earlier than two weeks after the completion of the pumping test.

ARCADIS

Thomas Fridirici
May 27, 2004

April 13, 2004 Letter

ARCADIS would also like to acknowledge receipt of your letter of April 13, 2004 regarding the concerns raised over the [REDACTED] South site. At this time, ARCADIS is taking your concerns under advisement within the context of the Pre-Drilling Plan Addendum. Many of the positive features that you have outlined for the [REDACTED] North site are also traits of the [REDACTED] South site. A PNDI search centered on the [REDACTED] South site also shows no conflicts and the site also provides adequate wellhead protection. As stated above, ARCADIS will continue to consider your concerns in our effort to identify a well location that is satisfactory to all concerned parties.

If you have any questions or comments regarding this letter, please contact Michael Bedard at (267) 685-1821.

Sincerely,

ARCADIS G&M, Inc.

Daniel McCarthy / p.m.

Daniel J. McCarthy
Senior Geologist

Michael F. Bedard

Michael F. Bedard, P.E.
Project Manager

Copies:

S. Werner, PADEP

[REDACTED] Cron, USEPA

K. Davies, USEPA

T. Hemerka, Bally Borough

G. Unger, Systems Design Engineering, Inc.

J. Pfeffer, Pfeffer Geotechnical Corp.

R. Gahagan, AHI

C. A. Gahagan, SPI